



16 April 2018

## ARENA Submission in response to the Facilitating Access to Consumer Energy Data Consultation Paper

### Summary

Thank you for the opportunity to make a submission to this consultation. This submission focuses on specific issues relating to data access identified through the joint ARENA-AEMO demand response competitive funding round which included small customer demand response aggregation.

Due to the scope of the program to date, these issues were primarily encountered in Victoria, where distribution businesses perform metering services, however they are also largely applicable under the broader competitive metering arrangements being implemented in other NEM jurisdictions. We believe the issues encountered point to major inefficiencies in business processes by both retailers and metering providers and this provides a significant material barrier to third party access to customer data and customers accessing the services these third parties can provide.

### About ARENA

The Australian Renewable Energy Agency (ARENA) was established with the aim of improving the competitiveness of renewable energy technologies and increasing the supply of renewable energy in Australia.

ARENA provides financial assistance to support innovation and commercialisation of renewable energy and enabling technologies. This assistance is designed to accelerate the commercialisation of these technologies by helping to overcome technical and commercial barriers. A key part of ARENA's role is to collect, store and disseminate knowledge gained from the projects and activities it supports for use by the wider industry and Australia's energy market institutions.

### ARENA-AEMO demand response trial

On 2 May 2017, ARENA and AEMO entered into a Memorandum of Understanding to jointly develop proof of concept projects that support the integration of renewable energy while maintaining system reliability and security. This includes the demand response funding initiative which is designed to deliver the following outcomes:

- Demonstrate that demand response is an effective source of reserve capacity for maintaining reliability of the electricity grid during contingency events, and that this resource can be rapidly established to provide such support;

- Provide an evidence base to inform the design of a new market, or other mechanism, for provision of demand response to assist with grid reliability and security;
- Inform price discovery, providing a benchmark for the cost of procuring demand response in the NEM; and
- Improve the commercial and technical readiness of demand response providers and technologies, including those involved in more innovative approaches such as engagement with mass market customers, or behavioural demand response.

The proposed approach is aligned with ARENA’s investment priority to drive innovation in the delivery of secure and reliable electricity, specifically through helping develop and commercialise flexible capacity technologies and services that can complement variable renewable energy generation. As variable renewable energy generation grows, demand response can cost-effectively be used to offset short-term imbalances between supply and demand, and also provide reserve cover to prevent grid emergencies during extreme peaks or capacity shortfalls, as well as frequency control and local network services.

ARENA is providing grant funding (structured in installments with portions able to be varied based on performance) to assist a range of energy users to become demand response enabled including funding for equipment or appliance load controls, metering and communications technology, storage and distributed generation assets. Compensation for dispatch (the available capacity being used) is being paid by AEMO under the existing Short Notice Reliability and Emergency Reserve Trader (SN RERT) program. Under the terms of the funding program, usage payments through the RERT are capped at \$1,000/MWh with a maximum of 10 calls per year, each up to four hours.

**Figure 1: Breakdown of Demand Response Portfolio by Customer Type**

	Project	Residential	Commercial	Industrial
NSW*	AGL	●	●	●
	Energy Australia NSW	●	●	●
	EnerNOC NSW		●	●
	Progressive Green (Flow Power)		●	●
VIC	Powershop	●	●	●
	United Energy Distribution	●	●	●
	EnerNOC VIC		●	●
VIC/SA	Energy Australia VIC/SA	●	●	●
	Planet Innovation/Zen	●	●	
	Intercast & Forge			●

The program requires some third party providers to access customer metering data to verify the customers’ participation and to determine fees payable by AEMO, to the provider, under the SN RERT program.

## Access to Data Stream Suffix and meter data

In order to measure demand response provided, AEMO requires certain data points from all providers. AEMO specifically requires the Data Stream Suffix (DSS) to facilitate third parties to access interval meter data held in its MSATS database. Access to this can be obtained in two ways:

- Asking a customer to collect it themselves; or
- Obtaining a signed Third Party Meter Data Request form from the customer for their specific distributor or retailer then the third party collecting the DSS on behalf of the customer.

A first issue is that there appears to be a lack of consistent understanding and use of the terms DSS and the National Meter Identifier (NMI). This causes significant confusion among retailers and network businesses.

Further, retailer and distributor call centre staff have limited or no awareness of what the DSS is or how to facilitate third party data access more generally. This results in protracted processes and customer frustration and confusion. It is clear that providing a customer or third party the DSS is not a part of the primary system available to call centre operators. Each retailer and distributor also has varying processes.

The process is different for each of the five distributors in Victoria. All require registering with the distributor to access the distributor portal, a process requiring various customer detail inputs and confirmation through email address. Four of five distributors will provide reports, however the data does not contain the DSS. Only one distributor was able to provide the DSS with a 1 day turnaround. Each distributor requires a different Third Party Consent form to be filled out and signed. Two of five distributors also require a copy of a signed document from the customer and proof of identity documents such as driver's license, along with "proof of third party's relationship with the customer".

Retail customers are often asked to email a specific email address and await a reply that takes days. This is evidently not a practical or viable method for obtaining the DSS and most customers evidently exit the process at this stage due to the high transaction cost.

Each distributor in Victoria had some form of third party data request document in paper form which must be physically signed by the customer. This is impractical and costly for any aggregator that needs to work at scale, and provides a significant and unreasonable barrier to customer participation.

Not being able to access the DSS means that meter data cannot be accessed which makes it impossible to verify or measure customer participation in a demand response event.

## Options to improve customer and third party data access

While these problems may currently be on the margins of the mainstream energy customer experience, ARENA sees growth in demand side participation as underpinning the transition to an affordable, reliable and secure renewable electricity grid.

A mass market adoption of small customer demand response provided by third parties will require appropriate mass market B2B and B2C platforms and processes. It is clear to ARENA that not only do present arrangements fall well short of this, but that industry participants also have weak incentives to invest in the development of industry-wide solutions, or even facilitate third party data access. As

such there appears to be a role for government to lead the development of a modern industry-wide solution that can meet customer needs now and into the future.

Potential models for a solution may build on existing energy customer transfer systems or be modelled on more advanced processes in other sectors (such as telecommunications).

Incremental improvements may include:

- Including (and clearly labelling) the DSS with the NMI on customer bills; and
- Standard procedures and training for call centre staff.

A comprehensive industry standard (like the Green Button) or the establishment of a national customer energy data portal, with appropriate identity verification, may be required in the longer term. Such a portal could provide valuable web services to customers, such as independent bill benchmarking and tariff comparisons using actual customer usage data, as well as a B2B application interface for customer-approved third party service providers. Regardless of the technical solution to improve customer and third party data access, it will be important to ensure robust security and privacy protections are in place, so as to facilitate confidence by industry and the community.

Overall, ARENA sees great potential for the growth of third party services and a growing need for secure third party access to customer data. This will need to be underpinned by the development of modern industry-wide data transfer platforms and services that are currently not present.

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